Meeting Notes

Discussion of Milestones Related to Waste Management Area C Closure, SST Closure Plan content, and Permit modifications

Meeting Date:

October 28, 2013

Location:

Ecology Building

Purpose:

Discuss HFFACO milestones M-045-61, -62 and -82 to better define the

relationships among these milestones and the content of the deliverables.

Attendees:

Jeff Lyon (Ecology), Jared Mathey (Ecology), Maria Skorska (Ecology),

Jim Alzheimer (Ecology), Brenda Jentzen (Ecology), Mike Barnes

(Ecology), Beth Rochette (Ecology), Joni Grindstaff (ORP), Mary Burandt (ORP), Doug Hildebrand (ORP), Jim Lynch (ORP), Tony Miskho (WRPS),

Jeff Luke (WRPS), Susan Eberlein (WRPS)

Background:

Hanford Federal Facilities Agreement and Consent Order (HFFACO) milestones M-045-61, M-045-62 and M-045-82 (copied below) have been listed as "to be missed" at the recent monthly project managers meetings. These milestones have been affected by budget constraints and delays in related activities. Today's meeting begins the process of defining what each deliverable under these milestones should comprise, and when these deliverables can be developed, to support progress on closure of Waste Management Area (WMA) C.

M-045-61	Submit to Ecology for review and approval as an Agreement primary document, a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C.	12/31/2014
M-045-62	Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Implementation Work Plan for WMA C.	06/30/2015
M-045-82	Submit complete permit modification requests for Tiers 1, 2, & 3 (see Appendix I) of the SST System, to support final closure requirements for WMA C.	09/30/2015

Appendix I of the HFFACO indicates that the Tier 1 closure plan addresses the Single Shell Tank (SST) system, a Tier 2 addresses each WMA, and a Tier 3 addresses each individual component or group of components (e.g. 100 series tanks, vaults, pipelines).

Topics discussed:

The topics discussed are summarized below. No specific decisions were made. One action was assigned to develop additional information for future discussion.

• Susan Eberlein (WRPS) opened the discussion stating that her current understanding of the requirements associated with closure planning was that:

- Risk Evaluation processes will consider the current and future impacts of the closed system components AND the contamination already in the soil AND the context (i.e. groundwater impacts from other sites)
- Remedial actions for the soil will be selected with an understanding of the closed configuration of the tanks and other components
- The closure configuration for the tanks and other components will be selected with an understanding of the remedial actions for the soil
 [NOTE: iteration may be required to identify a good configuration for both soil and tanks/components]
- o Closure actions for the WMA will be selected with an understanding of the other actions being taken for groundwater remediation
- o All decisions will consider both radionuclide and non-radionuclide contaminants so that an integrated decision can be made
- Maria Skorska (Ecology) noted that an RFI/CMS traditionally addressed the entire system, but in this case appeared to be one of several integrated parts (closure plans, CMS, groundwater plans)
- Brenda Jentzen (Ecology) recommended that when submitting the closure plans for WMA C, DOE formally request that the groundwater actions be addressed under the BP-5 plans.
 - o It may be possible to make that request early, once the performance standards and groundwater contamination are known.
 - The request should include a summary the proposed BP-5 actions to show how they will be protective.
- The above discussions suggested that the Tier 2 (WMA C) closure plan, the CMS for WMA C and the proposed actions for BP-5 were all needed at approximately the same time so that they could be reviewed in an integrated manner.
- It was noted that the Tier 3 (component) closure activity plans for WMA C would likely include:
 - o C-100 tanks
 - o C-200 tanks
 - o CR-vault
 - o C-301 catch tank
 - o Pipelines/ancillary equipment/diversion boxes
 - Final closure cap
- The group discussed what a Tier 1 (SST System) permit modification request might look like:
 - o Jared Mathey (Ecology) indicated that the draft Revision 9 permit had an outline of information that could be in a complete Tier 1 permit modification.
 - There was some discussion about the amount and type of process information that would be appropriate.
 - It was noted that the Tier 1 permit modification request might be very different if it were a
 modification to a complete permit (e.g., Revision 9 with full operational information such
 as training, inspections, contingency in place) or a modification for purposes only of
 supporting WMA C closure (e.g. a modification to Revision 8C, with only the information
 required for WMA C closure actions)
 - Jeff Lyon (Ecology) noted that the HFFACO milestone did not provide extensive detail about the Tier content, so that it would be good for the group to propose the structure and content most effective in moving closure actions forward.

- The current timing of completing the Revision 9 permit is not clear. Waiting to submit a modification request to Revision 9 could delay the M-045-82 and M-045-61 milestones.
- The Revision 9 permit will address many things outside the scope of WMA C closure, which are not necessarily pre-cursors to closure actions.
- Mary Burandt (ORP) noted that actions taking place under interim status (inspections, training, etc.) would continue, even if a modification focusing strictly on WMA C closure actions were developed.
- Mary Burandt (ORP) asked if the Tier 1 submittal might be considered a compliance schedule for all the other submittals associated with closure.
- Brenda Jentzen (Ecology) expressed concern that EPA is not comfortable with compliance schedules in the permit because in EPA's mind, missing information from a Part B permit application is not appropriate to be used as a basis for a compliance schedule (such as a, inspection schedule or closure plan).
- Tony Miskho (WRPS) indicated knowing the framework of what compliance schedules can be used for in the SST permit chapter is critical to know how to plan the permit modification(s).
- Jared suggested that we consider modifications to Revision 8C that address the WMA C closure related pieces only, and defer the other chapters (including system-wide information not required for WMA C closure) to Revision 9.
- There was some discussion about whether submittal requirements should be in the permit or in the HFFACO milestones. Since HFFACO milestones exist for the WMA C closure elements, some thought they should remain in HFFACO. Other things needed for the Revision 9 permit can be addressed separately.
- Brenda Jentzen paraphrased the preceding discussion into a suggestion that we put whatever is needed for WMA C closure into Permit Revision 8C (in the Tier, 1, 2, 3 permit modification request(s)) and separately deal with the other issues that will need to be resolved for Permit Revision 9.
- The group decided to proceed with the remaining discussion on an assumption that the Tier 1, 2, 3 permit modification requests would be addressed in Revision 8C. Discussion also occurred on splitting up the single permit modification into potentially multiple modifications.
- Brenda Jentzen (Ecology) indicated Ecology had begun development of checklists regarding various regulatory requirements that should be addressed in the permit.
- The group decided to discuss the relevant checklists of regulatory requirements to decide
 what would need to be included to close WMA C, and where it would be included (Tier 1,
 Tier 2 or Tier 3).
- It was noted that the first deliverables associated with WMA C closure would be provided some time after the Record of Decision (ROD) for the Tank Closure and Waste Management Environmental Impact Statement (EIS).
- The requirement checklists refer to "Dangerous Waste Management Units" and "Unit Groups". It appeared appropriate that requirements for the Unit Groups would apply to the Tier 1 (SST System) plan, and the Dangerous Waste Management Unit requirements would apply to Tier 2 (WMA C) plan.
- A number of the requirements associated with closure of units and unit groups addressed clean closure. It was recommended that a "Clean Closure Document" be developed. (Note: this is not a regulatory term, but is just used to identify a document for the purposes of these meeting notes.)
 - o The Clean Closure Document should be provided prior to the Tier 1, 2, 3 plans.
 - The Clean Closure Document should address the impracticability of clean closure of the SST WMAs.

- The Clean Closure Document should provide a basis for landfill closure for SST WMAs.
- The checklists addressed requirements for both clean closure plans and contingent closure plans [selected requirements from WAC 173-303-610, -640(8), and -665(6)(a)]. When the Clean Closure Document concludes it is impracticable to clean close WMA C, then contingent closure plans for WMA C would be required.
- The Tier 1, 2 and 3 closure plans for M-045-82would be contingent closure plans, addressing closure of WMA C as a landfill. If needed, the CMS for M-045-61 could also be included as part of the contingency closure plans
- Mary Burandt noted that ORP expects to submit a demonstration clean closure is not practicable, and that the document title will be in accordance with the applicable regulations.
- There followed a discussion of the items that could be in each Tier document by discussing the checklists.
- It was noted that the Corrective Measures Implementation Plan (CMIP) may serve a similar function to the Tier 3 component closure plans regarding details of the actions required for the contaminated soil.

• Clean Closure Plan possible content:

- o State the clean-up standards for contaminated media, structures, equipment.
- Describe numeric clean closure levels for the full suite of dangerous constituents generated or managed at the unit.
- Calculate the clean closure levels using appropriate methods (describe method and include calculations).
- For units with tank systems, discuss removal or decontamination of all waste residues, contaminated containment system components, soils, structures and equipment OR demonstrate that not all contaminated soil can be removed or decontaminated.

• Tier 1 Closure Plan possible content:

- Describe how final closure of the Unit Group (SST system) will be conducted in accordance with performance standards, including the following items:
 - Minimize the need for further maintenance
 - Minimize post-closure escape dangerous waste/constituents
 - Return land to appearance/use of surrounding land to degree possible
 - Identify the extent of the operation that will remain unclosed
- Estimate the maximum inventory of dangerous wastes that will be on-site over the active life of the facility.
- o Contain a schedule for closure of each unit (WMA) and for the facility (SST system).
 - It was suggested that this schedule may incorporate or reference HFFACO milestones.
- Explain if the planned closure schedule will take longer than 90 days for waste removal/treatment and 180 days for closure, and demonstrate why a longer schedule is needed.

Tier 2 Closure Plan for WMA C possible content:

- Describe how final closure of the Unit (WMA C) will be conducted in accordance with performance standards, including the following items:
 - Minimize the need for further maintenance

- Minimize post-closure escape dangerous waste/constituents
- Return land to appearance/use of surrounding land to degree possible
- Identify the extent of the operation that will remain unclosed
- Provide detailed description of other activities necessary during closure period to satisfy performance standards, including groundwater monitoring (reference BP-5 plans), runon and run-off control if applicable
- o Describe how the landfill will be covered with a final cover.
- Possibly include detailed plans and an engineering report describing the final landfill cover (alternately these items may be in a Tier 3 Component plan)
- o If the closure plan contains alternative requirements:
 - Include the alternative requirements or a reference to them
 - Identify any adjacent units that may have contributed to releases
 - Address how the alternative requirements will be protective of human health and the environment
- o If dangerous waste will be generated during closure, address how it will be handled
- Provide appropriate language regarding notice to local land authority and notice to deed in property
- o Provide appropriate language regarding certification of closure
- o If the WMA has had releases to the soil, ensure the groundwater monitoring requirements are addressed (through reference to the BP-5 plan)

Tier 3 Closure Activity Plans for Components in WMA C (or CMIP for soil actions) possible content:

- Provide detailed description of methods to be used during closure (including storing/treating/disposing generated waste)
- Provide detailed description of steps needed to remove or decontaminate systems, structures, equipment, soil, to include the following:
 - Procedures for dealing with equipment
 - Procedures for dealing with soil
 - Methods for sampling/testing surrounding soil
 - Criteria for determining how to satisfy the closure performance standard (Note: this item would be expected to reference the Appendix I Performance Assessment)
- Possibly include detailed plans and an engineering report describing the final landfill cover (alternately these items may be part of the Tier 2 WMA C plan)
- It was noted that a contingent Post-Closure Plan would also be required from WAC 173-303-640(8)(c)(ii), but the timing of the Post-Closure Plan was not clear.
- The Post-Closure Plan would include maintaining the integrity and effectiveness of the final cover, groundwater monitoring system maintenance and related topics.
- The Closure Plan requires detailed plans and an engineering report describing the final landfill cover. Those items will most likely be included in the Tier 2 (WMA C) plan or in a specific Tier 3 component plan.

The group concluded that a timeline shows the relationships between the key documents/deliverables, and the timing of deliverables was required as a next step. Once such a timeline is drafted, a follow-on meeting will be set.

Actions:

Develop a timeline showing relationships and estimated timing of development of key deliverables. Include key assumptions. (ORP/WRPS – Hildebrand/Eberlein)

Concurrence: